THE CLAIMS:

1. A process for the production of nuclear transferred porcine embryonic cells which includes providing a porcine oocyte at the Metaphase II stage of development from which the nucleus is removed, transferring a porcine karyoplast at the G0 or G1 state into the oocyte to give a nuclear transferred porcine embryonic cell and optionally culturing the nuclear transferred cell *in vitro* to allow one or more cell divisions to give a plurality of nuclear transferred porcine embryonic cells.

2. A process according to claim 1 wherein the nuclear transferred porcine embryonic cell or plurality of cells, such as a 2 to 32 cell mass, is synchronized at the G0 or G1 state, isolating a nuclear transferred karyoplast therefrom, and transferring said karyoplast into a second enucleated oocyte at the Metaphase II stage of development or to an enucleated zygote, or later stage embryo or embryonic cell to give a second nuclear transferred cell, which may be cultured *in vitro* to allow one or more cell divisions to give a plurality of nuclear transferred porcine embryonic cells.

3. A process according to claim 2 wherein the nuclear transferred porcine embryonic cell or plurality of cells is treated with an agent which prevents cell division but not nuclear division, such that a karyoplast isolated therefrom is derived from a cell possessing multiple nuclei.

4. A process for the production of porcine embryonic cells wherein the method of claim 3 is repeated a plurality of times.

5. A process for the clonal generation or propagation of pigs which process includes providing a porcine oocyte at the Metaphase II stage of development from which the nucleus is removed, transferring a porcine donor karyoplast at the G0 or G1 state into the oocyte to give a nuclear transferred porcine embryonic cell, and thereafter culturing the

nuclear transferred cell *in vitro* to allow one or more cell divisions to give a plurality of nuclear transferred porcine embryonic cells, and thereafter transferring a plurality of porcine embryonic cells so produced into a pregnancy competent uterus of a female pig which at conclusion of the pregnancy term gives rise to one or more genetically identical off-spring.

6. A process according to claim 1 wherein a karyoplast is synchronized at the G1 state by use of DNA synthesis inhibitor and/or a microtubule inhibitor and/or use of means which do not involve serum starvation of cells.

7. A process according to claim 1 wherein a karyoplast is synchronized at the G0 state by nutrient deprivation or chemical treatment.

8. A process according to any of claims 1 to 5 in which the karyoplast is genetically altered or modified.

9. A process according to claim 6 where microtubule inhibition is achieved by the application of nocodazole.

10. A process according to claim 1 wherein karyoplast synchronization at G1 is achieved by the application of aphidicolin.

11. A process according to any of claims 1 to 11 wherein the porcine karyoplast at the G0/G1 state is fused and activated in an enucleated porcine oocyte at the Metaphase II stage of development by application of multiple electrical pulses spaced in their order of application, or by other means of generating multiple transient increases in intracellular Ca levels.

12. A process according to claim 11 wherein from 1 to 6 pulses are delivered at an interval between each pulse of from one minute to sixty minutes.

13. A process according to claim 12 wherein pulses are applied at a thirty minute interval.

14. A method according to claim 11 wherein each pulse is a set of pulses of 2 to 4 pulses, spaced from each other by 1 to 20 seconds.

15. Porcine embryonic cells or cloned pigs when produced according to a process comprising or including a process as defined in any preceding claim.

16. Progeny of a pig according to claim 15.

17. A cloned pig produced from a nuclear transferred porcine embryonic cell.

18. Use of cloned pigs in agriculture, for organ production, or oocyte and embryo production.